AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1- 25. (canceled)

26. (currently amended) A method for selectively reacting reagents in a gas phase exothermic reaction for the selective chlorination and/or oxychlorination of alkenes or alkanes comprising reacting said reagents in a tubular fixed bed reactor comprising a metallic monolith having channels with walls carrying a catalytically active phase or an intermediate layer carrying a catalytically active phase, wherein said catalytically active phase catalyses ~~a selective exothermic gas phase reaction~~ the selective chlorination and/or oxychlorination of alkenes or alkanes, and wherein the metallic monolith has a flat temperature profile in the tubular reactor whereby heat of reaction in said exothermic reaction is removed by the metallic monolith thereby reducing hot spots, said metallic monolith having:

i) a surface area per unit volume of at least 6 cm^2/cm^3,
ii) a cell density of between 8 cells/cm^2 and 100 cells/cm^2, and
iii) a length of between 30 cm to 1 m.

27. (canceled)

28. (currently amended) The method of claim ~~27~~ 26, wherein the reaction is selected from the group consisting of the conversion of ethylene with chlorine to 1,2-dichloroethane, the conversion of ethylene with hydrogen chloride with air or oxygen to give 1,2-dichloroethane, the conversion of ethane with hydrogen chloride with air or oxygen to give a saturated or unsaturated chlorinated hydrocarbon, and the reaction of methane with chlorine.

29. (currently amended) The method of claim ~~27~~ 26, wherein the catalyst for the oxychlorination reaction of ethylene contains copper in an amount of 1 to 12 wt % of the intermediate layer.

30. (previously presented) The method of claim 29, wherein the catalyst also comprises at least one alkali metal, alkaline earth metal, group IIB metal or lanthanide in a total amount up to 6 wt % of the intermediate layer.

31. (currently amended) The method of claim ~~27~~ 26, wherein the catalyst for the oxychlorination reaction of ethane contains in the intermediate layer copper and an alkali metal in the atomic ratio 2:8.

32. (previously presented) The method of claim 31, wherein the catalyst also comprises at least one alkaline earth metal, group IIB metal or lanthanide.

33. (currently amended) The method of claim ~~27~~ 26, wherein the catalyst for the selective oxidation reaction of ethylene comprises at least silver, and at least one alkali and/or alkaline earth metal.

34. (canceled)

35. (currently amended) The method of claim 28, wherein the conversion of ethane with hydrogen chloride with air or oxygen produces 1,2-dichloroethane.

36. (currently amended) The method of claim 28, wherein the conversion of ethane with hydrogen chloride with air or oxygen produces vinyl chloride.

37-40 (canceled).